

# DOCUMENT RESUME

ED 142 630

UD 017 132

AUTHOR Chorost, Sherwood B.  
 TITLE Improving the Designated Priority Skills of Reading and Mathematics Through the Career Awareness Program.  
 INSTITUTION New York City Board of Education, Brooklyn, N.Y. Office of Educational Evaluation.  
 PUB DATE 76  
 NOTE 26p.; New York City Board of Education Function No. 20-63421  
 EDRS PRICE MF-\$0.83 HC-\$2.06 Plus Postage.  
 DESCRIPTORS \*Creative Writing; Elementary Education; \*Industrial Arts; Language Skills; \*Program Evaluation; \*Reading Comprehension; \*Resource Materials; \*Student Motivation  
 IDENTIFIERS New York (New York); Umbrella Projects

## ABSTRACT

This report evaluated the sixth year of the Career Awareness Program for elementary school students in New York City. The program was designed to interest, motivate, and improve language skills of students. Two activity modules, the Publishing Activity Centers (PAC) and the Industrial Arts Mobile Unit were used in the program. The PAC module was designed to improve reading and language skills. The Industrial Arts Mobile Unit was designed to teach shop safety, identification of shop tools, introductory occupational information and development and construction of a project. Sixty-nine students who participated in the program were evaluated. A teacher rating instrument was developed to measure the gains in interest, motivation and reading for the PAC unit. Additionally, a 42 item scale was adapted to measure knowledge of tool facts and career information in the Industrial Arts Unit. Teachers reported that the PAC program motivated most of the pupils to practice reading and writing. The results of the criterion referenced test developed for the Industrial Arts Unit indicated a change in student career awareness information between the time of the pre and the post test. (JP)

\*\*\*\*\*  
 \* Documents acquired by ERIC include many informal unpublished \*  
 \* materials not available from other sources. ERIC makes every effort \*  
 \* to obtain the best copy available. Nevertheless, items of marginal \*  
 \* reproducibility are often encountered and this affects the quality \*  
 \* of the microfiche and hardcopy reproductions ERIC makes available \*  
 \* via the ERIC Document Reproduction Service (EDRS). EDRS is not \*  
 \* responsible for the quality of the original document. Reproductions \*  
 \* supplied by EDRS are the best that can be made from the original. \*  
 \*\*\*\*\*

ED142630

IMPROVING THE DESIGNATED PRIORITY  
SKILLS OF READING AND MATHEMATICS  
THROUGH THE CAREER AWARENESS PROGRAM

SCHOOL YEAR 1975 - 1976

SHERWOOD B. CHOROST, PH.D.

An Evaluation of Selected New York City Umbrella Programs  
funded under a Special Grant of the New York State  
Legislature performed for the Board of Education of the  
City of New York for the 1975-1976 school year

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

DDO 17132

DR. ANTHONY J. POLEMENI, DIRECTOR

BOARD OF EDUCATION OF THE CITY OF NEW YORK  
OFFICE OF EDUCATIONAL EVALUATION  
110 LIVINGSTON STREET, BROOKLYN, N. Y. 11201



## TABLE OF CONTENTS

Introduction.....	page 1
I. The Program.....	page 4
II. Evaluation Procedures.....	page 7
III. Findings.....	page 10
IV. Summary of Major Findings, Conclusions And Recommendations.....	page 16
Tables and Appendices.....	page 19
Table 3.1 Publishing Activities Center Teacher Evaluation Survey.....	page 19
Table 3.2 Publishing Activities Center Teacher Evaluation Survey.....	page 20
Table 3.3 Publishing Activities Center Administrators Evaluation Survey.....	page 20
Table 3.4 Industrial Arts Mobile Unit Career Awareness Test.....	page 21
Table 3.5 Industrial Arts Mobile Unit Career Awareness Test.....	page 21
Appendix A-Evaluation Survey (Teacher's form)	
Appendix B-Evaluation Survey (Administrator's form)	

## INTRODUCTION

The Career Awareness component of the Umbrella Program has been on-going for six years. Each year it has been evaluated and refunded. At the outset of the current evaluation, this consultant was informed that there had been a major conceptual change in that two of the three evaluation objectives were eliminated. This was corroborated by representatives of the N.Y.C. Office of Educational Evaluation and principal members of the N.Y.C. Umbrella Program. They reported that prior approval for the change was authorized by the New York State Department of Education.

In substance, the following two objectives were dropped from the evaluation: (1) Student participants in the program attending 60% or more of the scheduled sessions will improve significantly in reading comprehension ability, beyond anticipation, as measured by the pre-post administration of an appropriate reading comprehension subtest such as the Metropolitan or City-Wide Reading Tests, and (2) Student participants in the program attending 60% or more of the scheduled sessions will improve significantly in mathematics achievement, beyond anticipation, as measured by the pre-post administration of the City-Wide Mathematics Achievement Tests' problem-solving component or similar problem-solving mathematics standardized achievement subtests.

The reported rationale for this modification makes sense. The Career Awareness component has two major projects

(described in Chapter One). In neither the Industrial Arts Mobile Unit nor the Publishing Activity Centers (PAC) are there licensed teachers trained to teach reading or mathematics. That significant improvement in these, and other, tool skill areas may be obtained would be a concrete dividend to the proclaimed program goal of providing an exciting, supportive learning arena for pupil career enrichment and improved motivation for reading and writing.<sup>1</sup> "Most educators would agree that both motivation and aspiration are essential to educational progress."<sup>2</sup> Also, the average amount of pupil time spent in the program's Mobile Unit was estimated<sup>3</sup> to be four hours (one per week). Pupil exposure to the Publishing Activity Center was highly variable, ranging from one to nine hours (over a three month period) with the estimated<sup>4</sup> average time at three to four hours. It seems reasonable to assume that a program which does not employ reading or math teachers, does not focus on skill improvement in these specific areas, and does not standardize minimum time requirements in either the Mobile Unit or PAC to produce a measureable skill effect, should not be evaluated for success on the basis of changes in reading and math test scores.

1. Direct conversation with the Supervisor of the Industrial Arts and Umbrella Programs.

2. From evaluation report - Elementary School Career Awareness Program and Resource Center 1972-1973

3. estimate by the Mobile Unit Industrial Arts teacher.

4. estimate by three paraprofessional staff at observed school sites.

Attributing direct test performance differences, or lack of differences, to the Career Awareness Program appears to be unwarranted, especially in the light of months of ongoing, content relevant educational instruction in the classroom.

As an initial task, the consultant, and the supervisor of the program decided to meet to establish a reasonable and relevant statement of the program goals which could be operationalized and used to measure the effectiveness of the Career Awareness Program. It was jointly agreed that objectives to be measured in the PAC module should relate to (1) ratings of pupil interest and enthusiasm for reading and writing, and (2) teacher and administrator estimates of the usefulness of the project to teach reading comprehension skills and to reach children with learning handicaps. Two scales were developed to measure these variables. These are discussed in Chapter Two.

Further, no measure of reading or math gain was felt to be appropriate for the Mobile Unit experience which is specifically oriented around industrial arts concepts. Here, a criterion referenced test of tool knowledge and job titles, developed by the supervisor, was adapted for use as an index of program effectiveness (see Chapter Two).

These modifications were presented to, and accepted by the N.Y.C. Office of Educational Evaluation.<sup>5</sup>

5. Letter dated 3/28/76 to Evaluation Liason, N.Y.C. Office of Educational Evaluation.

## I. THE PROGRAM

This project includes two modules, the Publishing Activity Centers and the Industrial Arts Mobile Unit, each of which warrants a separate discussion.

As described in the project proposal, Publishing Activity Centers provide for the publication of pupils' creative writing and art work, which is developed under the guidance of classroom, reading, and/or cluster teachers. Pupils write, rewrite after proofreading, and type the materials. They layout, paste up and publish the copy by using the various peices of equipment such as sign maker, stencil cutter, mimeograph, binder, etc. Under the supervision of a licensed teacher, para-professionals provide the training of on-site personnel in the schools. They also supervise the activites of pupils and perform other duties related to the achievement of objectives and goals, data gathering, and dissemination activites.

In their sixth year of operation, the PAC modules have been installed in 194 sites. These are serviced by trained paraprofessionals on a scheduled and/or periodic basis, e.g.--one, two or three days a week. Site visits were made at three centers, located at P.S. 181Q, P.S.272K and P.S. 91Q. That each center was similar but uniquely different was a striking observation. Basically, each center had the same printing equipment, consisting of stencil cutter, duplicator, collator, cutter, binder, typewriter and sign maker. Two shared a regular classroom (in rather crowded conditions), and the other

shared a utility room with remedial reading staff. Use of the facility, as well as number and selection of pupils, seemed specific to each school.

As described by the program supervisor, each principal was given the option of how he/she wished to utilize the PAC program. On site visits and interviews with paraprofessionals indicated that in most schools whole classes, usually designated by the principal, participated in the publishing activity. Sometimes teachers would send groups of 6 to 8 at a time, with each group receiving training and participating in a work project once or twice (the total class involvement being limited to four full days - one day per week over almost a month). Sometimes a whole class would attend each of the four sessions to work on the project. Even with the class teacher present, this approach seemed to offer a more limited hands-on experience for each child. Other uses of the PAC included selection of specific pupils, sometimes by the principal, other times by the teacher. In addition, selections were made on the basis of child related needs (e.g. poor reading scores or low reading interest, or pupils with English as a second language, etc.); on the basis of pupils volunteering; in relation to pupil strengths (e.g. high creative writing ability, artistic ability, or good reading skills); and even on the basis of reward for good behavior.



Printing projects included class research booklets, signs, or individual papers, as determined, typically, by the child's class teacher. In some cases pupils were able to type (or have their material typed); in others, booklets were published directly from handwork copy. In all of the PAC variations, pupil and teacher response to the program was enthusiastic.

On the basis of teacher evaluation forms given to those teachers whose classes had completed a PAC experience between the beginning of the 1975-6 school year through the end of April 1976, the number of pupils who received PAC instruction totaled 3917. Presumably, the 121 teacher responses received represent 100% of the population of completed classes. It does not include classes whose PAC experiences are scheduled to be completed in May and June 1976. This cut-off was necessitated by the May 7 data completion deadline.

The second module, the Industrial Arts Mobile Unit, is described as a total Industrial Arts classroom, specially designed and built into a trailer truck body. This unit is driven to designated school sites where it provides a licensed Industrial Arts teacher and an aide who instruct pupils of different elementary grade levels. At the P.S.276K Mobile Unit site visit, the teacher reported that he was working with groups of 10 to 12 pupils at a time, covering grades two through six. It was reported that when assigned by the principal to the project, teachers usually sent the whole class rather than selected pupils.

The four session Mobile Unit curriculum was designed to give each child a session on rules of shop safety, identification of shop tools, introductory occupational information, and a construction project. The teacher indicated that he sees classroom teachers in order to try to coordinate class learning with the shop project, for example, some projects included wooden maps, models of Indian homes, implements of colonial times, Cuisenaire rods etc. The Mobile Unit was to service three selected schools in Community School District 18 and the existing Elementary School Industrial Arts Program. Only findings relating to the eleven classes to be processed at P.S. 276 are included in this evaluation. The evaluation report deadline limited the number of classes which had both pre and post test data. Also omitted from the study were classes which only had two scheduled visits to the Mobile Unit. Under these conditions, the full curriculum could not be offered and tested. Ninety-nine children participated in the pre-test evaluations at P.S. 276, but only sixty-nine completed post testing.

At least 5 schools were to be serviced as part of the original program design. However, this phase of the project was reported to have started late due to a delay in receiving city tax levy money.

## II. EVALUATION PROCEDURES

As presented in the Introduction of this report, two original project objectives were deleted from the study. They dealt with

direct improvement in reading comprehension and math skills. However, it was recognized (though not included in the project objectives) that the PAC module of the Career Awareness Program should produce strong gains in motivation for reading and writing. The consultant and the program supervisor collaborated in the development of two indirect measures of pupil motivation and program effectiveness. The first was a teacher rating instrument (Appendix A).

The data on the rating scales were analyzed by calculating the percentage of responses to each alternative on each question. The teacher ratings were also analyzed and compared on the basis of how pupils were assigned to PAC.

An administrator rating instrument was developed (Appendix B) which was designed to measure principal estimate of how valuable the Publishing Activities Center was to his overall school program. No comparable ratings were utilized for the Industrial Arts Mobile Unit, since this module was not similarly structured nor designed to deal with reading interest or reading skill development.

Neither PAC nor the Mobile Unit dealt sufficiently with the teaching of mathematics skills or enhancement of mathematics interest. No evaluation was attempted in this area.

The next objective of the proposal read: "Student participants in the program attending 60% or more of the sessions will improve significantly in career awareness concepts as measured by pre-post application of a rating scale to be developed."

The features of the PAC module offer little in the way of career awareness, except in the one case where a class researched various careers as the topic for their project. The Industrial Arts

Mobile Unit did have a component which related generally to occupations and specifically to basic knowledge of tool names and tool usage in the industrial arts family of jobs. A forty-two item scale was adapted from a pictorial multiple choice test developed previously in the Career Awareness program. The 4 parts of this test required pupils to (1) select the one among four pictures of tools named by the examiner (14 items), (2) match pictures of tools to their utensils (7 items), (3) match a picture of a tool to one of four others pictured which was in the same family of tools (6 items) and (4) identify the one picture among four which depicts a person in an occupation named by the examiner (12 items). The test was administered to the pupils in the Mobile Unit on the first of four sessions by the Industrial Arts teacher. The test was used as a criterion referenced instrument. Answers were scored, and those items failed on pre-test became the instructional objectives for each child.

Post testing was administered during the fourth (last) session. A "t" test was computed between average pre and post test percentages for the 69 pupils in this module. Each pupil's score on pre and post test were compared. The percentage of instructional objectives passed on the post test was computed and compared to the percentage of items initially correct but answered incorrectly on the post test. This was done to determine whether there might have been a significant decrement as well as increment in scores of individual items.

### III. FINDINGS

The modified objective related to reading comprehension is that pupils who participate in the program should show measurable gains in interest and motivation in writing and reading.

Of 118 teachers responding to the question, "Did the children show an enthusiasm to write by having something in the PAC class magazine?", 76 (64%) chose the alternative "every child was very eager to participate"; 39 (33%) chose "most children selected were very eager to participate"; 2 (2%) indicated that "less than  $\frac{1}{2}$  of the children were very eager to participate"; and 1 (1%) said that "none of the children were very eager to participate". (Table 3.1) In comparing responses of teachers who felt that the PAC program should be increased against those who felt it should be maintained at the same level, the only difference appeared when whole classes took part in the PAC. 78% (43 of 55) of the teachers who felt PAC should be increased indicated that every child showed enthusiasm to write while only 44% (12 of 27) of those who felt the program should be maintained at the same level said that every child showed enthusiasm to write. Perhaps a clue to the difference in degree of teacher support relates to how whole classes were introduced. No data on this was available. However, direct observation of both approaches, and paraprofessional reports, suggest the greater efficiency of working with rotating small groups rather than the entire class at once.

Of the 97 teachers responding to the question, "After a PAC produced material was completed, did the children show

interest in reading their peer's work?", 56 (58%) indicated that "all" pupils did; 34 (35%) replied that "most" pupils showed interest; 1 (1%) said "less than  $\frac{1}{2}$ " did; 3 (3%) said "few" showed interest, and 3 (3%) indicated that "none" of the pupils showed interest in reading their peer's work. (Table 3.1)

Thus 97% of the teachers reported that the PAC program helped either most or all pupils to show an enthusiasm to write. And 93% of the teachers reported that it helped either most or all of the pupils to show an interest in reading PAC work by their classmates.

In terms of how teachers reported they made use of the PAC program, 26 of 109 responses (24%) indicated that it was a valuable teaching tool used to develop reading skill objectives. 18 (17%) said it was used to develop reading interest, while 55 (50%) said that they used it both for development of reading skills and reading interests. 10 (9%) indicated that they did not use the project to develop reading skill or interest. Thus, 90% of teachers reporting said they applied PAC program work to their reading curriculum in order to develop skills or interests. (Table 3.1)

With regard to teacher ratings of whether the PAC program was helpful with pupils who had learning handicaps, 12 of 80 responses (15%) said it was helpful in promoting language interest, 5 (6%) said it was helpful in promoting language skills, 56 (70%) said it helped them in both these areas, while only 7 (9%) did not feel it was helpful to them in developing language skills

or interests with learning handicapped pupils. (Table 3.1)

94 of 115 (82%) teachers answering said that on PAC scheduled days they either felt that there was no noticeable attendance differences from other days, or they weren't sure. None said attendance was poorer, and 21 (18%) rated attendance as generally better. While no causal inference can be drawn from this latter finding, it suggests that almost one fifth of the teachers associated the PAC program with a factor probably related to pupil motivation and interest. (Table 3.1)

The evaluation of whether pupils improved significantly in career awareness concepts was applied only to the Industrial Arts Mobile Unit. The average pre test score of 69 pupils on the 42 item test of tool facts and career information was 76% (with a range of from 38% to 95%). The post test average rose to 87% (ranging from 50% to 100%). A "t" test of the significance of difference between the means of pre and post tests indicated that the post test gain was significant beyond the .001 level. (Table 3.4)

After instruction, an average of 73% (488 of 668) of instructional objectives were passed. 41% of the pupils passed 90% or more of their pre test failures (instructional objectives) after instruction, and 62% of the pupils passed 70% or more of their instructional objectives on post test. Only 6 (9%) of the pupils passed less than 50% of the instructional objectives on post test, and they passed 2 of 6, 2 of 6, 6 of 14, 4 of 9, 4 of 9, and 7 of 16 objectives respectively.

The average child passed 7 of 10 instructional objectives in tool facts and career information.

The average 73% gain, after instruction on items initially failed, compares very favorably with a 5% post test failure average on pre test success items. (Table 3.5) This would appear to indicate that the change in career awareness information between pre and post test scores indicate the strong positive effect of intervening instruction in the Industrial Arts Mobile Unit.

The last evaluation objective was that "the program, as actually implemented, will coincide with the program as described in the proposal."

On site observations unequivocally found both the PAC and the Mobile Unit modules to be operating as described. Periods of instruction were on schedule, organization of the curriculum was well structured, supplies and equipment necessary for instruction were present and samples of pupil work in various stages of readiness indicated satisfactory productivity. The quality of many of the projects was exemplary. Pupil motivation and teacher and administrator enthusiasm for the programs appeared to be remarkably high. Pupil attendance was at or near 100% for each unit observed.

Recommendations from the last prior study of the Career Awareness Program was not available to the consultant due to reported irregularities in the 1974-5 evaluation report.

One further finding merits attention. This relates to quantitative data requested in the PAC survey scale and spontaneous narratives offered by school teaching and administrative



staff.

Teachers and administrators seem to strongly support the concept and performance of the Publishing Activity Center. (No scale was presented for the Mobile Unit module.) As noted in Table 3.2, 79 (66%) of teachers recommend an increase in the program; 6 (5%) support maintaining it at the same level or increasing it; 33 (28%) want the program to be maintained at the same level; none want it reduced and 1 (1%) indicated it should be terminated (no comments were added to indicate the reason for wanting termination.)

It seems important to include a few of the spontaneous remarks of teachers working with the PAC program:

"They looked upon each other's work like they were actors in the opening of a Broadway play."

"Many who were reluctant to write creatively have begun to participate."

"Our first publication produced encouragement for even those who did not contribute to it."

"Children are thrilled to see their work as well as the work of their peers. It's like seeing themselves on film."

"It enhances our language arts and reading program. It greatly stimulates the children's desire to write creatively."

"Math book was published which built math - reading skills."

"Pupils proof-read the work to be used in publishing magazines. As a result, this experience was helpful in promoting concern for spelling."

"The program was thoroughly enjoyed by all the children. It fostered a genuine interest in listening to and writing poetry."

"All children benefited--especially those who are slow readers. They felt useful."

Administrators seemed even more strongly in support of the program. 12 of 64 reporting (19%) suggest the program be maintained, and the remaining 52 (81%) indicate that it should be increased. (Table 3.5) Several examples of the uniformly positive administrator comments are:

"It sparkled every activity we carried on and involved many children who otherwise would not receive recognition."

"This program has performed miracles with our HC 30 classes."

"Our children have benefitted through it in art, reading, and comprehension skills, and in the feelings of self-importance and status."

"Program asset to all children, especially those with learning disabilities."

"The publishing center has created an air of excitement about writing and reading."

"One of the best programs around."

"Extremely worthwhile as a learning experience and as a culmination activity."

"This is an exceptionally productive experience that is benefitting a wide range of children."

"It has expanded children's creative and basic writing abilities. Teachers are enthusiastic and several have worked independently with their classes with the minipress."

"This is an excellent program offering an outstanding variety of language arts activities for our children."

On the basis of the evidence reported above, the Career Education Program has reached many children, teachers, and administrators. It has achieved its stated objectives and appears to have had a potent impact in upgrading the quality of education.

#### IV. SUMMARY OF MAJOR FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

Analysis of the data collected yielded the following findings:

- (1). On site visits to three of the PAC units and to the Industrial Arts Mobile Unit indicated that the Career Awareness Program was implemented as outlined in the project proposal.
- (2) There was enthusiastic support for the program by teachers and administrators. They characterized the PAC program as extremely helpful in promoting language arts skills and interests for children with a wide range of learning ability and reading skills. Almost 100% of the combined 183 respondents state that the program should be maintained at the same level, or increased.
- (3) 97% of responding teachers report that the PAC program helped motivate most or all pupils in reading interest. 91% of teachers reporting said that they used the PAC project to stimulate reading interest or reading skill or both, suggesting the usefulness of PAC as a support for the language arts curriculum. 91% of the teacher ratings noted that the program was helpful in development of language skills or interests with learning handicapped pupils.
- (4) Career awareness, as measured by the criterion referenced test developed by the program, was significantly increased as a result of pupil experience in the Industrial Arts Mobile Unit. 73% of instructional objectives were mastered by the 69 pupils in the evaluation study.

Some recommendations which might increase the effectiveness of the program follow:

(1) The PAC program might be spread too thin for maximum benefit. Either PAC paraprofessionals should be increased (funds allowing) to service each school at a level which would offer more than an average of 4 hours per pupil; or teachers should be trained and supported by PAC paraprofessionals to increase effective use of the PAC facility in each school; or paraprofessionals should be consolidated to offer more potent effect in selected schools. Letters from schools frequently decry time deficits in the program due to its limited staff numbers. The program quality and enthusiasm of PAC staff seems exemplary.

(2) The variety of modes of selection of pupils to the PAC units was considerable. While present data did not warrant a conclusion that any mode was superior in terms of teacher ratings, the program would seem better organized if it offered principals the choice of two modes which staff found most easily adapted to maximize pupil instruction. In this regard, the option of sending a full class into a PAC center might be eliminated in favor of a small group rotation method.

(3) The program appears to have merit for enrichment and remedial purposes. If additional funds become available, the PAC concept, effective in the elementary grades, should be expanded to include the junior high school level.

(4) Additional typewriters should be provided in the PAC centers in order to allow more pupils to type their work. This

could reinforce spelling, reading interest and provide a valuable supplementary skill.

(5) It is recommended that the Mobile Unit provide at least four sessions to pupils. Classes with only two contact hours should be eliminated, as this seems to be an insufficient amount of time in which to cover the full curriculum of shop safety, occupational information, and a shop project. This might be accomplished by working more intensively with fifth and sixth grade classes, and eliminating second and third grade classes which were included in the program. The time limitation noted, placed severe restrictions on the use of the career awareness library of materials in the mobile unit.

(6) The Career Awareness Program appears to be very successful in accomplishing its major goals. It is, therefore, recommended that the program be continued.

(7) The title, Career Awareness Program, is misleading. It suggests that, as a result of experience in the program, there will be an increase in career awareness. Yet the operation of the PAC module does not focus on career awareness per se. Also, the instruction in the Mobile Arts Unit seems oriented specifically around industrial arts (shop) tool skills and knowledge. It is recommended that the program be given a title more appropriate to the goals and activities of the two modules.

TABLE 3.1  
PUBLISHING ACTIVITIES CENTER  
TEACHER EVALUATION SURVEY

QUESTION	RESPONSE	FREQUENCY	%
Enthusiasm to write N=118 responses*	Every child	76	64
	Most children	39	33
	Less than $\frac{1}{2}$	2	2
	A few children	0	0
	None	1	1
Interest in reading peers work N=97 responses*	All	56	58
	Most	34	35
	Less than $\frac{1}{2}$	1	1
	A few children	3	3
	None	3	3
Teacher able to use project to build reading comprehension N=109 responses*	Yes-reading skill objectives	26	24
	Yes-reading interest	18	17
	Both skill & interest	55	50
	Neither skill nor int.	10	9
Helpful for children with learning handicaps N=80 responses*	Yes-language interest	12	15
	Yes-language skill	5	6
	Both interest & skill	56	70
	Neither language interest nor skill	7	9
Attendance N=115 responses*	Better	21	18
	Same or not sure	94	82
	Poor	0	0

\*Some categories not rated by 119 respondents.

TABLE 3.2  
PUBLISHING ACTIVITIES CENTER  
TEACHER EVALUATION SURVEY

QUESTION	RESPONSE	FREQUENCY	%
Recommendation for Publishing Activities Center program N=119 responses	Terminated	1	1
	Reduced	0	0
	Maintained at same level	33	28
	Maintain or increase	6	5
	Increase	79	66

TABLE 3.3  
PUBLISHING ACTIVITIES CENTER  
ADMINISTRATORS EVALUATION SURVEY

QUESTION	RESPONSE	FREQUENCY	%
Recommendation for Publishing Activities Center program N=64 responses	Terminated	0	0
	Reduced	0	0
	Maintained at same level	12	19
	Increased	52	81

TABLE 3.4  
INDUSTRIAL ARTS MOBILE UNIT  
CAREER AWARENESS TEST

% CORRECT

FREQUENCY  
PRE TEST      POST TEST

30-39%	1	0
40-49%	0	0
50-59%	3	4
60-69%	10	3
70-79%	29	5
80-89%	24	18
90-99%	2	34
100%	0	5

AVERAGE %

76%

87%

N=69 pupils

$t_D=14.86$

Significant beyond the .001 level

df=68

TABLE 3.5  
INDUSTRIAL ARTS MOBILE UNIT  
CAREER AWARENESS TEST

		PRE TEST	
		PASS	FAIL
POST TEST	PASS	2109	488 (73%)
	FAIL	121 (5%)	180
		2230	668*

\*Total Instructional Objectives  
Total Test Items=2898  
N=69



- A. How many children in your class were involved? 20
- B. How were they selected? to give each an opportunity to participate
1. On the day the program was available to your class, was the attendance of those children involved generally better \_\_\_\_\_ the same \_\_\_\_\_ poorer \_\_\_\_\_ don't know \_\_\_\_\_ than on other days.
- Comments Attendance always good
2. Did the children show an enthusiasm to write by having something in the Publishing Activity Center class magazine? Check one.
- a.) Every child selected was very eager to participate \_\_\_\_\_
- b.) Most children selected were very eager to participate ✓
- c.) Less than  $\frac{1}{2}$  of the children were very eager to participate \_\_\_\_\_
- d.) A few children were eager to participate \_\_\_\_\_
- e.) None of the children were very eager to participate \_\_\_\_\_
- Comments \_\_\_\_\_
3. After a Publishing Activity Center produced material was completed did the children show interest in reading their peer's work?
- a.) All ✓
- b.) Most \_\_\_\_\_
- c.) Less than  $\frac{1}{2}$  \_\_\_\_\_
- d.) A few children \_\_\_\_\_
- e.) None did \_\_\_\_\_
- Comments \_\_\_\_\_
4. Were you, the teacher able to use the class project to build reading comprehension?
- a.) the class project was a valuable teaching tool- I used it to develop reading skill objectives Recall, organizing events logically
- b.) the class project was used to develop reading interest ✓
- c.) both a and b \_\_\_\_\_
- d.) neither a or b \_\_\_\_\_
- Comments Also new vocabulary was learned. Children motivated to read further as well as special interest.
5. For children with learning handicaps the class project
- a.) was helpful in promoting language interest (communication knowledge) ✓
- b.) was helpful in promoting language skill (sentence structure, spelling, reading fluency) ✓
- c.) both a and b \_\_\_\_\_
- d.) neither a or b \_\_\_\_\_
- Comments Anytime to participate, children make an effort to have their work as correct as possible.
6. Would you recommend that the Publishing Activity Center program be:
- a.) terminated \_\_\_\_\_
- b.) reduced \_\_\_\_\_
- c.) maintained at same level ✓
- d.) increased \_\_\_\_\_
- Comments Children very enthusiastic about being published. Interested in classmates work as well.

APPENDIX B

CAREER AWARENESS PROGRAM  
Function #20-63421  
City Wide Umbrella

DATE April 13, 1976

Community School Board # \_\_\_\_\_ School# \_\_\_\_\_

Administrator \_\_\_\_\_ Teacher \_\_\_\_\_

1. Would you recommend that the Publishing Activity Center program be:

- a.) terminated \_\_\_\_\_
- b.) reduced \_\_\_\_\_
- c.) maintained at same level \_\_\_\_\_
- d.) increased ✓ \_\_\_\_\_

Comments A very effective program!  
\_\_\_\_\_  
\_\_\_\_\_